Address Theme Strategic Plan

FY2019 through FY2021

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Theme Lead Agencies:
U.S. Census Bureau & Department of Transportation (DOT)

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Executive Summary

The Address Theme consists of data sets that contain the data elements, attributes, and metadata that specify a fixed geographic location by reference to a thoroughfare or landmark, or a point of postal delivery.

The Federal Geographic Data Committee (FGDC) operates under the Office of Management and Budget (OMB) Circular No. A-16 Revised (August 19, 2002) and provides leadership for the National Spatial Data Infrastructure (NSDI) using a portfolio management approach for federal geospatial datasets.   The Address Theme is one of the 17 National Geospatial Data Asset (NGDA) Data Themes approved by the FGDC Steering Committee in 2016.[1]

The Address Theme Leads provide leadership and coordination at the NGDA Theme level and report to the FGDC Steering Committee on an annual basis. The Theme Leads report on the status of the National Address Database (NAD) and additional theme datasets, as well as the activities of the Address Subcommittee and subgroups. The Address Subcommittee assists the Address Theme lead agencies, the U.S. Census Bureau and the U.S. Department of Transportation, in developing and promoting a national strategy to identify, prioritize, implement, coordinate, manage, and provide oversight of geospatial address data related activities. This includes activities related to supporting accessible, accurate, and spatially referenced national address data available in partnership with tribal, federal, state, county, local, non-profit, and private organizations.[2]

The Address Theme consists of the following dataset:

Address Theme NGDA	Manager
National Address Database (NAD)	Department of Transportation/U.S. Census Bureau

It is important to note that the management of the Address Theme is an interagency effort. All agencies that contribute to the theme's assets share responsibility to meet the goals, objectives, and actions outlined below for theme management.

The Strategic Plan for the Address Theme follows Objective 2B of the NGDA Management Plan that requires all NGDA Themes prepare a strategic plan.[3] The goals and objectives set by the Address Theme Leads reflect the priorities for this theme for the current and next two fiscal years. This Strategic Plan outlines actions that are necessary for the successful creation and sharing of address data in addition to coordinating with stakeholders.

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[1] Federal Geographic Data Committee, "National Geospatial Data Asset Management Plan: Portfolio Management Implementation Plan for the OMB Circular A–16 Supplemental Guidance: Appendix E" (Reston, Virginia, USA, 2017), https://www.fgdc.gov/policyandplanning/a-16/appendixe/20170324-ngda-themes-fgdc-sc-revised-appendixe.pdf.

[2] Federal Geographic Data Committee, "Address Subcommittee" (Reston, Virginia, USA, n.d.), https://www.fgdc.gov/organization/working-groups-subcommittees/address-sc/index_html.

[3] Federal Geographic Data Committee, "National Geospatial Data Asset Management Plan: Portfolio Management Implementation Plan for the OMB Circular A–16 Supplemental Guidance" (Reston, Virginia, USA, 2014), 25.

Goal 1: Ensure the Effective Development of the Address Theme Datasets.

- **Objective 1.1.** Develop and maintain authoritative address data sets.
- **Objective 1.2** Provide content required by users of the NAD.
- **Objective 1.3.** Facilitate address data aggregation at the state and local government level for the NAD.

Goal 2: Facilitate the Sharing and Distribution of Address Theme Datasets.

- **Objective 2.1.** Ensure metadata are published for Address Theme datasets.
- **Objective 2.2.** Ensure map services are published for Address Theme datasets.

Goal 3: Coordinate Among the Address Theme Stakeholders.

- **Objective 3.1.** Collaborate with members of the Address Subcommittee and subgroups.
- **Objective 3.2.** Ensure visibility and responsiveness to oversight agencies and advisory committees.
- **Objective 3.3.** Engage with stakeholders.

Background

The Census Bureau and the DOT are the lead federal agencies for the Address Theme. OMB Circular A-16 Revised defines a theme as representations of conceptual topics describing digital spatial information for the Nation. Themes contain associated datasets (with attribute records and coordinates) that are documented, verifiable, and officially designated to meet recognized standards. A theme contains one or more datasets of geographic information from which other datasets can be derived.

Paragraph 8.d. of OMB Circular No. A-16 Revised, dated August 19, 2002, directs the development of a strategic plan for each theme:

> (2) Provide leadership and facilitate the development and implementation of a plan for nationwide population of each data theme. Plans will include the development of partnership programs with states, tribes, academia, the private sector, other federal agencies, and localities that meet the needs of users, address human and financial resource needs, identify needs for standards, metadata, and the Clearinghouse, and advance a timetable for the development of National Spatial Data Infrastructure (NSDI) data themes.[4]

The purpose of this Strategic Plan is to present the activities associated with the Address Theme in addition to noting opportunities and challenges in managing the theme.

Goal 1: Ensure the Effective Development of the Address Theme Datasets.

The NGDA Theme Lead Agencies and NGDA Dataset Manager are committed to the development, maintenance, and distribution of authoritative address data. The NGDA Dataset Managers across the

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[4] Circular No. A-16 Revised

theme standardize the geospatial datasets and work together to ensure the datasets meet NGDA requirements. Fostering partnerships with other agencies and throughout the geospatial community encourages widespread use of these datasets.

Objective 1.1. Develop, maintain, and distribute authoritative address data sets

Anticipated Outcomes. The Address Theme will consist of authoritative address data. State and local governments are typically the authoritative sources for address points representing residential and commercial structures. Federal programs are also potential sources for address related datasets.

> **Action 1.1.1.** Add additional and updated data to the NAD as they are made available from state and local partners.

> **Action 1.1.2.** Maintain and update the NAD as funding permits.

Objective 1.2. Provide content required by users of the NAD

Anticipated Outcomes. The NAD consists of features and attributes that meet user needs and can be provided by partners.

> **Action 1.2.1.** Evaluate user requirements for NAD content.

> **Action 1.2.2.** Work with data providers to determine feasibility of proposed content.

> **Action 1.2.3.** Publish updated NAD content guidelines

Objective 1.3. Facilitate address data aggregation at the State level for the NAD

Anticipated Outcomes. High level workflow models are developed that help states establish state-wide data aggregation processes for the NAD.

> **Action 1.3.1.** Identify high level categories of data aggregation practices.

> **Action 1.3.2.** Publish workflow models.

Goal 2: Facilitate the Sharing and Distribution of Address Theme Datasets.

The Geospatial Platform (GeoPlatform.gov) is designed to be a hub for geospatial data discovery and analysis. Machine-readable and open formats of NGDA metadata and Web Map Services (WMS) are key to utilizing the capabilities of the GeoPlatform.

Objective 2.1. Ensure metadata are published for Address Theme Datasets.

Anticipated Outcomes. Address Theme datasets are discoverable through data portals by publication of metadata that documents data content and includes links to access the data.

> **Action 2.1.1.** Include NGDA designation keyword tags and NGDA alternate titles in metadata to clearly identify NGDAs within the Address Theme.

Action 2.1.2. Ensure the use of the same title in the metadata record and the NGDA Master Dataset List.

Action 2.1.3. Provide direct Uniform Resource Locators (URLs) to the data set, online resources, web services, APIs, and additional documentation per FGDC guidelines.

Action 2.1.4. Create geospatial metadata in compliance with International Standard Organization (ISO) standards.

Action 2.1.5. Include a referencing thumbnail "browse" graphic in dataset metadata where appropriate.

Objective 2.2. Ensure map services are published for Address Theme datasets.

Anticipated Outcomes. NGDA datasets for the Address Theme will be available as web services for efficient consumption and proliferation in web applications.

Action 2.2.1. Provide web services for all NGDAs in the Address Theme per FGDC guidelines.

Action 2.2.2. NGDA metadata for must include an actionable Service Endpoint URL that will launch a web mapping service. If no actionable Service Endpoint is available, provide the URL that gets the user closest to the web service. As individual services are developed, the metadata link(s) will be updated to the actionable Service Endpoint.

Action 2.2.3. In the metadata, URLs will be tagged with the acronym that best represents the service, such as REST, WMS, WFS, etc. per the NGDA Metadata Guidance.[5]

Action 2.2.4. ISO metadata will include a standalone Service Identification Record. This will allow the linking of the metadata of current and future versions of the same dataset to the same Service Identification Record.

Goal 3: Coordinate Among the Geospatial Address Stakeholders.

The Theme agencies and dataset managers will coordinate address information sharing among tribal, state, and local governments, federal agencies, and private organizations. Forums for the open exchange of information about Address Theme data, such as the Address Theme Community portal on the GeoPlatform, will assure the availability of, and public access to, address data and associated metadata from distributed databases. Outreach to agencies that consume or produce datasets will reduce duplication of effort and will increase the overall quality of shared address data.

Objective 3.1. Collaborate with members of the Address Subcommittee and subgroups.

Anticipated Outcomes. The Address Subcommittee includes tribal, federal, state, and local stakeholders that represent data users and data providers. The Address Subcommittee and subgroups collaborate with partners to develop and maintain high-quality address datasets.

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[5] Federal Geographic Data Committee, "National Geospatial Data Assets (NGDA) Metadata Guidelines" (Reston, Virginia, USA, 2016), 5-6.

Action 3.1.1. Conduct meetings of the Address Subcommittee to provide an open forum for the exchange of ideas to improve the overall management and availability of address datasets.

Action 3.1.2. Identify collaborative opportunities with tribal, federal, state, county, and local governments regarding consistent address datasets.

Action 3.1.3. Establish subgroups as needed to work on specific topics of interest or activities.

Objective 3.2. Ensure visibility and responsiveness to oversight agencies and advisory committees.

Anticipated Outcomes. Address Theme Leads and Address Subcommittee chairs report to the FGDC oversight committees such as the Steering Committee and to the National Geospatial Advisory Committee (NGAC).

Action 3.2.1. Initiate opportunities and respond to requests to provide updates on the Address Theme and NAD to the FGDC Steering Committee.

Action 3.2.2. Initiate opportunities and respond to requests to provide updates on the Address Theme and NAD to the FGDC NGAC.

Action 3.2.3. Respond to inquiries from the Office of Management and Budget (OMB) and the Government Accountability Office (GAO).

Objective 3.3. Engage with stakeholders.

Anticipated Outcomes. Address Theme Leads and Dataset Managers attend conferences and events to engage face to face with stakeholders to promote the theme datasets and theme related activities.

Action 3.3.1. Identify target audiences and their key events.

Action 3.3.2. Prepare presentations and other promotional and informational materials.

Action 3.3.3. Attend events.

Challenges and Opportunities

The Address Theme community faces a critical challenge in implementing this strategic plan:

- Lack of funding to develop, maintain, and support a National Address Database (NAD) program.

Despite the challenges, the Address Theme community, the Census Bureau, and DOT have opportunities to coordinate address related activities within the federal government especially for address data standards.

Implementation of the Address Theme Strategic Plan

Following the adoption of the Address Theme Strategic Plan, the Theme Lead and NGDA Dataset Manager(s) will develop an implementation plan outlining how the goals and objectives will be achieved. The implementation plan will include:

- Tasks and milestones
- Timelines
- Responsible parties
- Performance indicators/measures
- Identification of resources available to achieve the objectives

The Executive Champion and Senior Agency Official for Geospatial Information will provide guidance throughout the development and implementation of the project plan.

Theme Management Roles and Responsibilities

Role	Responsibilities
Executive Champion	Provide high-level sponsorship and support for the Address Theme and associated NGDA Datasets; facilitate communication among the FGDC, other Executive Theme Champions, and agencies to promote effective and efficient development and management of themes and their associated resources to benefit implementation.
Senior Agency Official for Geospatial Information	Oversee, coordinate, and facilitate the agency's implementation of the geospatial-related requirements, policies, and activities. While distribution of these may cover various components of an agency, OMB will look to the senior agency official for information regarding the agency's coordination of these activities.
Theme Lead	Coordinate and oversee the strategic planning and implementation of the Address Theme and associated NGDA Datasets and the development of annual Address Theme Report.
NGDA Dataset Manager	Act as primary data steward(s), directly develop(s) national geospatial data assets (i.e. datasets) that fall under an NGDA Theme (in whole or part) in conjunction with other NGDA Dataset Managers and data stewards; work with Theme Lead to produce annual NGDA Dataset Reports.